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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,958	06/14/2001	Kazuo Sano	4468-016	4198
7590 03/07/2006				
LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER, LLP Suite 310 1700 Diagonal Road Alexandria, VA 22314			EXAMINER AMINI, JAVID A	
			ART UNIT 2672	PAPER NUMBER

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/879,958

Applicant(s)

SANO ET AL.

Examiner

Javid A. Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 9-18 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 8 and 19-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/16/2005 has been entered.

***Allowable Subject Matter***

Claims 8 and 19-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: it compares the differences between the two lights irradiated for toning from the target color and the test sample for calculating the blending ratio of colorants. Regarding claims 20-21 are objected, because they are dependent to claim 19.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "a blending ratio" in line 7, third paragraph. There is insufficient antecedent basis for this limitation in the claim.

Also claim 1 recites the limitation "a user" in lines 4, 10-11, second, forth and fifth paragraphs, respectively. There is insufficient antecedent basis for this limitation in the claim.

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Claim 11 recites the limitation "a blending ratio" in line 7, third paragraph. There is insufficient antecedent basis for this limitation in the claim.

Also claim 11 recites the limitation "a user" in lines 4, 10-11, second, forth and fifth paragraphs, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "a blending ratio" in line 9, third paragraph. There is insufficient antecedent basis for this limitation in the claim.

Also claim 12 recites the limitation "a user" in lines 6, 12-13, second, forth and fifth paragraphs, respectively. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 7, 9-18, and 22-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Sarah A. Douglas and Arthur E. Kirkpatrick, (hereinafter is referred as Sarah),

Claim 1.

Regarding preamble in claim1, that claims a computer color matching calculates a blending ratio (Examiner's interpretation: it can be considered as normalized values of X, Y, Z in table II on page 105, see Sarah) of colorants based on stored color data (Sarah on page lines 13-15 teaches users must often navigate within the color space using incremental refinement strategies until they match the computer-generated color to a desired color. Sarah does not explicitly specify

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stored color data, however, from previous teaching provides enough information that the generated color to a desired color is stored in a computer) including data of color chips and colorants (Sarah in fig. 3 illustrates clearly two small rectangles, one of which presented the target color and the other one the controlled color e.g., a color chip) and for presenting information of the blending ratio to a user (Sarah in table II and in fig. 3 presents information of the mixing or blending ration of the target color by sliders in fig. 3 and the values of XYZ in table II to a user).

Sarah in fig. 3 illustrates data identifying a color chip (i.e. equivalent to one of the small rectangle is the target color), and the target color selected by the user. (Sarah in fig. 3 presents differences between color specification values corresponding to the selected color chip or controlled color and color specification values corresponding to a desired target color, by adjusting the sliders and the values are listed in table II).

The next step of the claim is calculating a blending ratio of colorants for reproducing the target color, i.e. obvious to a person skill in the art in order reproducing the target color using some calculation to achieve the value of blending ratio, (see Sarah in fig. 3 and table II).

The next step of the claim for supplying data of the blending ration to be presented to a user, Sarah in table II shows differences of color data, and in fig. 3 illustrates data of the blending ration to the user based on visual perception of the object color of the selected color chip and desired target color.

Sarah does not teach a calculating system on server that stores color data, but Holub teaches controlling color reproduction at multiple sites (network). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the

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teaching of Holub into Sarah in order to modify or to incorporate the Apple Macintosh and Microsoft Windows that Sarah uses into fig. 3A of Holub to have access to the system 100, which has a network 11 having a pipe 11a through which multiple nodes (or sites) of network 11 can be linked for data flow between nodes. Network 11 may be a telecommunication network, WAN, LAN (with a server) or Internet based.

Regarding claim 2, Sarah on page 96 under the subject of "introduction" teaches both the Apple Macintosh and Microsoft Windows provide such tools as part of their system software, and the system can be incorporated with Holub's controlling color reproduction at multiple sites (network).

Regarding claim 3, Sarah in table II shows the color specification value and in fig. 3 illustrates the sliders, which can be adjusted to a different color specification values, and the sliders are considered as input data.

Regarding claim 4, Sarah on page 112, under subject of "Method" teaches the slider trace explicitly represents time and the values of the color model parameters the users were continuously selecting. Figures 6(a) through (d) show four such traces. The locations of the three sliders are shown on a vertical scale from zero to one. Time in seconds extends along the horizontal axis. The location of the target color is represented as a horizontal dashed line in the plot for each slider. Sarah on the same page at first paragraph teaches if a choice is made with perfect knowledge of the color model, the observed behavior will be deterministic: the slider will be immediately set to the correct value. In three moves, the controlled color will exactly match the target.

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Regarding claim 6, the step is obvious, because if Sarah in fig. 3 performs a matching color, then the calculated value of the colorants should be known.

Regarding claim 7, Sarah does not teach color data includes data of costs of colorants. However, it is obvious to multiply the cost of the colorant to the amount of colorant to calculate the total cost of colorant. Since Sarah uses Apple Macintosh and Microsoft Windows, and spreadsheet is one of their tools, in table II shows color data corresponding to their color name, and it's obvious to a person skill in the art to add a column to that spreadsheet for cost of each target color value.

Regarding claims 9 and 10, the step is obvious because a spectrophotometer and colorimeter are for measuring the relative intensities of light in different parts of a spectrum and colorimeter is for determining and specifying colors.

Regarding claims 11, and 12, the content of these claims are similar to the content of claim 1, therefore, the rejection of claim 1 applies to the rejection of these claims.

Regarding claim 13, the content of this claim is similar to the content of claim 2, therefore, the rejection of claim 2 applies to the rejection of this claim.

Regarding claim 14, the content of this claim is similar to the content of claims 3 and 4, therefore, the rejection of claims 3 and 4 applies to the rejection of this claim.

Regarding claim 15, the content of this claim is similar to the content of claim 4 therefore, the rejection of claim 4 applies to the rejection of this claim.

Regarding claim 16, the content of this claim is similar to the content of claim 6, therefore, the rejection of claim 6 applies to the rejection of this claim.

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Regarding claims 17 and 18, the content of these claims are similar to the content of claim 7, therefore, the rejection of claim 7 applies to the rejection of these claims.

Regarding claims 22-25, Sarah in figs. 3-4 and table II illustrates the limitations of these claims. The descending or ascending order can be viewed clearly, e.g., from dark color to lighter color or from darker color to lighter color, in fig.4.



***Conclusion***

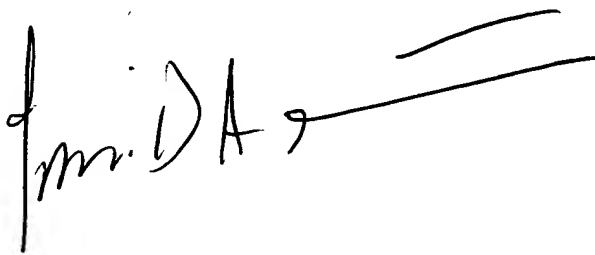
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini  
Examiner  
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Javid Amini

A handwritten signature in black ink, appearing to read "Javid Amini", with a long horizontal flourish extending to the right.